

Claims

What is claimed is:

Sub A1

1. A method for providing native language query service for Internet users by using a plurality of search engines in the Internet, each of said search engines having a respective dedicated language, adapted for receiving query requests containing query words of said dedicated language and returning query results in relation to said query words, said method comprising the steps of:
 - (a) receiving at a site an original of said query requests from one of said Internet users, said original query request containing said query words of native language of said user;
 - (b) selecting a suitable search engine from said plurality of search engines;
 - (c) translating said query words of native language into query words of dedicated language of said selected search engine;
 - (d) constructing a new query request directed to said selected search engine based on said original query request and said query words of dedicated language;

(e) sending said new query request to said selected search engine and receiving a returned query result;

(f) sending said query result back to said user as a query result in relation to said original query request.

5 2. The method according to claim 1, wherein step (b) comprises the step of selecting said search engines from said plurality of designated URLs in said original query request as the selected search engine.

10 3. The method according to claim 2, wherein step (c) comprises the steps of: on the basis of said URL in said original query request, retrieving a search engine template matching said URL from a search engine template storage;

translating said query words of native language into said query words of a dedicated language defined in said retrieved search engine.

15 4. The method according to claim 3, wherein step (c) further comprises the steps of:

searching a dedicated language corresponding to said URL from history records in said site based on said URL in the event no search engine template matching said URL

is retrieved from said search engine template storage;

determining positions of said query word parameters by using linguistic characteristics of parameter values;

translating said query words of native language at said positions into said query

5 words of said dedicated language.

5. The method according to claim 3, wherein step (d) comprises the step of replacing said query words of native language in said original query request with said query words of said dedicated language so as to form said new query request.

6. The method according to claim 4, wherein step (d) comprises the step of
10 replacing said query words of native language in said original query request with said query words of said dedicated language so as to form said new query request.

7. A method for providing native language query service for Internet users by using a plurality of search engines in the Internet, each of said search engines having a respective dedicated language, adapted for receiving query requests containing query
15 words of a dedicated language and returning query results in relation to said query words, said method comprising steps of:

(a) receiving at a site said query request from said Internet users, said original query request containing an URL requested by said Internet users, said URL having a prefix for designating a site;

(b) removing said prefix from said URL;

5 (c) selecting a suitable search engine from said plurality of search engines;

(d) performing the following steps in the event said removed prefix is a redirect prefix;

(d1) sending a request containing said URL to said selected search engine and receiving a web page as a response;

10 (d2) adding a translation prefix before URLs that need said query words and a redirect prefix before other URLs in said web page, so as to form a new web page;

(e) performing the following steps in the event said removed prefix is a translation prefix;

15 (e1) translating said query words of user_s native language in parameters of said URL into said query words of a dedicated language of said selected search

engine;

(e2) replacing said query words of user_s native language in parameters of said URL with said query words of said dedicated language;

(e3) adding said redirect prefix before said URL;

5 (e4) generating a new web page, embedding said URL and a Script program in said web page, said Script program enabling a client which receives said new web page to perform a step of automatically sending another original query request based on said URL embedded in said web page;

10 (f) sending said new web page back to said user as a query result in relation to said original query request.

8. The method according to claim 7, wherein step (c) comprises the step of selecting said search engine designated by said URL as said selected search engine.

9. The method according to claim 8, wherein step (e1) comprises the steps of: on the basis of said URL, retrieving said search engine template and matching 15 said URL from a search engine template storage;

translating said query words from native language into said query words of a dedicated language defined in said retrieved search engine.

10. The method according to claim 9, wherein said step (e1) further comprises the steps of:

5 searching a dedicated language corresponding to said URL from history records in said site based on said URL; in the event none of said search engine templates match said URL as retrieved from said search engine template storage;

 determining positions of said query word parameters by using linguistic characteristics of parameter values;

10 translating said query words of said native language at said positions into said query words of said dedicated language.

11. The method according to claim 7, wherein step (e) is

 (e) performing following steps in the event said removed prefix is said translation prefix;

15 (e1) translating said query word of said user_s native language in parameters of said URL into a plurality of said query words of said dedicated

language of said selected search engine;

5 (e2) replacing said query word of user_s native language in parameters of said URL with each of said plurality of query words of said dedicated language respectively and forming a plurality of URLs;

10 (e3) adding a redirect prefix before each of said plurality of URLs;

(e4) setting one of said plurality of URLs as a default URL;

15 (e5) generating a new web page, embedding said plurality of said URLs and a Script program in said web page, said Script program enabling said client which receives said new web page to perform steps of: displaying said plurality of query words of said dedicated language in hyper text format, and automatically sending another original query request based on said default URL embedded in said web page.

12. A system for providing native language query service for Internet users, comprising a plurality of search engines in the Internet, each search engine having a respective dedicated language, adapted for receiving query requests containing query words of said dedicated language and returning query results in relation to said query words, wherein said system utilizes a query translation server which comprises:

a client interface, for receiving query requests sent by clients and returning query results to said clients;

a request distribution apparatus, for receiving said query requests from said client interface, removing prefixes from requested URLs, and distributing said query

5 requests to different components;

a web page retrieving apparatus, for receiving said query request whose prefix is a redirect prefix from said request distribution apparatus, sending said query request to a search engine designated by an URL and obtaining a requested web page;

a web page modification apparatus, for forming a new web page by adding
10 translation prefixes before URLs that need query words and adding redirect prefixes
before other URLs in the obtained web page, and sending said new web page to said
client interface;

a query translation apparatus, for receiving said query request whose prefix is a translation prefix from said request distribution apparatus, translating query words of user's native language in the requested URL into and replacing them with query words of a dedicated language of said search engine, and adding a redirect prefix before said URL;

a web page generation apparatus, for generating a new web page, embedding
said URL and a Script program in said web page, and sending said new web page to said
client interface, said Script program enabling a client which receives said new web page
to perform a step of automatically sending another query request based on said URL
5 embedded in said web page.

13. The system according to claim 12, wherein said query words of native
language are speech query words.

14. A system for providing native language query service for database users,
comprising a plurality of databases, each database having a respective dedicated
10 language, adapted for receiving query requests containing query words of said dedicated
language and returning query results in relation to said query words, wherein said system
utilizes a query translation server which comprises:

a client interface, for receiving said query requests sent by clients and returning
said query results to said client;

15 a query translation apparatus, for translating said query words of user's native
language in said query requests received by said client interface into and replacing them
with said query words of the dedicated language of the database;

a query result obtaining apparatus, for sending the translated said query requests to the databases designated by said query requests and obtaining said query results.

15. The system according to claim 14, wherein said query words of native language are speech query words.

5 16. A program storage device readable by machine, tangibly embodying a program of instructions executable by the machine to perform method steps for providing native language query service for Internet users by using a plurality of search engines in the Internet, each of said search engines having a respective dedicated language, adapted for receiving query requests containing query words of said dedicated language and 10 returning query results in relation to said query words, said method comprising the steps of:

(a) receiving at a site an original of said query requests from one of said Internet users, said original query request containing said query words of native language of said user;

15 (b) selecting a suitable search engine from said plurality of search engines;

(c) translating said query words of native language into query words of dedicated language of said selected search engine;

(d) constructing a new query request directed to said selected search engine based on said original query request and said query words of dedicated language;

(e) sending said new query request to said selected search engine and receiving a returned query result;

5 (f) sending said query result back to said user as a query result in relation to said original query request.